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SOME ERRORS REGARDING THE HABITS OF
OUR BIRDS.

BY T. M. BREWER, M. D.

THERE are few who have written upon the habits of our birds that have not inadvertently committed errors. There are none of us, certainly no ornithologists, who, with all the care they may have taken to be right, and with all possible desire to be exact, have not had occasion to retrace their steps, and seek to amend their record. There is no name, however celebrated in the annals of science, but has come down to us associated with more or less of inaccurate observations; and the more extensive his researches, the more brilliant his discoveries, the more numerous shall we find the mistakes and errors he shall have placed on record. These considerations suggest great charity and forbearance in dealing with the errors, the wrong conclusions, or the inaccurate generalizations from too few facts, or from facts which different circumstances, at other times, cause to assume a very different aspect.

At the same time, however charitable we may be, however lenient even towards errors and incorrect statements

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that apparently might have been avoided, we should also, all of us, never hesitate to expose and to correct whatever we know to be wrong. We all know but too well, that when a grave error has once been deliberately given as a fact by a distinguished authority, how hard and apparently impossible it is to stop its currency as truth, and to correct the mistaken belief it has caused, and is continually causing.

Take for instance the statement made by one of the earliest explorers of the natural history of our Pacific shores, that the egg of the California Vulture (*Cathartes Californianus*) is *jet black*. However conflicting with all inference by analogy this statement must have ever appeared to every one familiar with Oölogy, it has found its way into nearly every work on American Ornithology published during the present century.

In no department of natural history is extreme accuracy so absolutely indispensable as in that to the study of which the writer has given his chief attention, the nesting and eggs of birds, which, for convenience, is called Oölogy. As the writer, if he lives long enough to publish the completion of his labors in this department, will have to confess himself not an exception to the rule—to which he can find none—and must retrace, amend, and, if he can, efface, it will become him to be especially lenient in his allusions to the mistakes made by the greater lights of American Ornithology.

Among our writers on these subjects, few enjoy or deserve a higher reputation for intelligent observation, great care and general accuracy in his descriptions, than the distinguished pioneer of American Ornithology, Alexander Wilson. The discoverer of many of our rarer birds, he was also a very close observer of their habits, and many of

his descriptions of some of the more common ones are so full and accurate, that they leave us little to add to them. Yet even Wilson, in several noticeable instances, in writing about birds that are far from being uncommon or rare, has given descriptions and accounts which the experience of others, and especially those of the writer, have not been able to verify. We will speak of only a few of these instances.

Let us first take the common American Goldfinch (*Carduelis tristis*), so widely distributed, so familiar to every one, and read what Wilson writes in reference to its nest and eggs: "They build a very neat and delicately formed little nest, which they fasten to the twigs of an apple tree, or to the strong, branching stalks of hemp, covering it on the outside with pieces of lichen, which they find on the trees and fences; these they glue together with their saliva, and afterwards line the inside with the softest downy substances they can procure. The female lays five eggs, of a dull white, thickly marked at the greater end; and they generally raise two broods in a season."

It appears singular to all who are familiar with the nest and eggs of the Goldfinch, which in Massachusetts, so far as the writer has observed, agree in no one thing with the above, how this description could have found a place in the work of so accurate and trustworthy a writer. The explanation is not easy, nor shall we try to suggest one. We will only state, that, without exception, we have ever found the egg unspotted, of a uniform white color, which, when not blown, has a slightly bluish shade. The nest is neat, but "delicate" is far from being an appropriate expression. It is not to be used in reference to the nest of this bird, as we should apply it to the nest of the Hum-

ming Bird, or to that of the Blue-Gray Flycatcher. It is not a "little" nest in view of the relative size of the bird, and we never saw one that was ever covered on the outside with lichen. With us this bird, so far as the writer knows, never builds its nest until as late as the middle of July, and never raises more than a single brood in one season.

To the question: To what bird did the nest described by Wilson as that of the Goldfinch belong? we will in Yankee fashion reply by asking another. Could he by any possibility have had in view the nest and eggs of the *Poliophtila cœrulea*? This is what Wilson says in regard to the nest and egg of this last-named bird: "It arrives in Pennsylvania, from the South, about the middle of April, and about the middle of May builds its nest, which it generally fixes among the twigs of a tree, sometimes at the height of ten feet from the ground, sometimes fifty feet high, on the extremities of the top of a high tree in the woods. This nest is formed of very slight and perishable materials, the husks of buds, stems of old leaves, withered blossoms of leaves, down from the stalks of ferns, coated on the outside with grey lichen, and lined with a few horse hairs. Yet in this frail receptacle, which one would think scarcely sufficient to admit the body of the owner, and sustain even its weight, does the female cow-bird venture to deposit her eggs."

It does not become a writer who has never happened to have seen the nest of this bird *in situ*, to be over-confident in correcting the above statement. Yet he will venture to say that several kind friends who live, or who have lived, where these birds are common, have supplied him with many nests and eggs of this bird, and the very

last epithet he would think of applying to any he has seen is the word "*frail*." On the contrary, if he were asked to name a bird, the nest of which combined beauty, completeness, safety, and (in view of the small size and light weight of the parent) strength, he could think of no bird he would sooner name than the one he is speaking of. Remember that the bird, as Wilson himself tells us, "but for its length of tail would rank next to the Humming Bird in magnitude." Its nest has invariably been found, so far as we know, very large for the size of its builder, with soft but strongly felted walls, a great depth of cavity, so that there is no danger of the eggs ever rolling or being thrown out by the motion of the branches, or of being broken.

Here let us make a suggestion. Some of our birds, like the Humming Birds, the *Parula Americana*, and others, occupy their nests before they are completed, and finish them afterwards. Sometimes the female begins to deposit its eggs before the nest is half finished, and while incubation goes on, its mate busies himself in completing, strengthening, and beautifying the structure. The Gnat-Catcher may, and is quite likely to be a bird that does the same thing, and Wilson may have seen one not finished, while all we have seen may have been completed. Be that as it may, the whole genus of *Poliophtilæ*, so far as we know, *P. cœrulea*, *P. melanura* and *P. Lembergii*, all have the same style of nest, and all are conspicuous for their elegance and substantial form.

The Indigo Bird (*Spiza cyanea*), Wilson tells us, is "numerous in all the settled parts of the Middle and Eastern States," and yet he says "The nest of this bird is usually built in a low bush, among rank grass, grain, or clover, suspended by two twigs, one passing up each side ;

and is composed outwardly of flax, and lined with fine dry grass. I have also known it to build in the hollow of an apple tree. The eggs, generally five, are blue, with a blotch of purple at the great end."

To this we must add the negative evidence, that we have never found this bird breeding as above described, and, so far as we know, the eggs are invariably white, with only a very light tinge of blue, and they never have purple markings at the greater end, nor have they any spots or markings whatever.

One more remarkable case of incorrectness on the part of Wilson, and we pass to consider other writers. Speaking of the nest and eggs of the Black-throated Bunting (*Euspiza Americana*), he says, "They seem to prefer level fields covered with rye grass, timothy, or clover, where they build their nest, fixing it on the ground, and forming it of fine dry grass. The female lays five white eggs, sprinkled with specks and lines of black."

The position of the nest and materials is, in most cases, as stated; but the eggs are not white, and are unspotted. They are of one unvarying shade of green, strongly tending to blue. Occasionally the nests are built more elaborately than others, and on low bushes or tufts of grass a foot or two above the ground.

Mr. Nuttall, of all our writers who have written so much, has, perhaps, the least to correct where he gives his own personal experiences. Of course he has copied or incorporated into his own narrative very many errors that have originated with others, and for which he is only indirectly responsible. He has also failed to detect some very important errors, when the opportunity was presented, and the means spread open before him. We will take only a single instance. One of the most common birds

of Massachusetts, and especially of that part where Mr. Nuttall resided for many years, is the *Empidonax minimus*, the habits of which, its nesting and eggs, he fully describes, but all of which he attributes to an entirely different species which, so far as I am aware, is never found in Massachusetts: I mean the *Empidonax Acadicus*. To be sure Mr. Nuttall was not alone in this. Even after the Bairds had discovered and described the *E. minimus* as a new species, it was several years before the natural sequence was traced out to its legitimate end. It seems to us now remarkable, as we look back upon the past, and consider how familiar a bird the Least Fly-Catcher was to Mr. Nuttall, that he never once seems to have suspected it of being a new and undescribed species. The error made by Wilson in describing the nest and egg of the *E. Acadicus*, may have contributed to delay and to prevent the discovery of the general error and of the confounding of the species. It was not until by a lucky accident, a parent bird of the true *E. Acadicus*, shot on its nest, was sent, with its eggs and nest, to Prof. Baird, that the whole was made clear, and facts in regard to the two species rightly understood. And here the writer may as well make the confession that all the while he had in his own cabinet the eggs of both species, but supposing the one to be the *Acadicus*, by the rule of exclusion he guessed the other to be, possibly, the egg of the *minimus*, and both were wrong of course. The late Dr. Henry Bryant also, one of our most acute and observing ornithologists,* calls attention to what he supposed to be an error of writers in speaking of the *Acadicus*, as being wild and inhabiting the most solitary places, he having found the supposed birds generally quite familiar, and breed-

*Proceedings of the Boston Society of Natural History, vol. vi. p. 430.

ing near his house. He was unaware that the writers he speaks of, were not wrong in what they had said of the *Acadicus*, and that he and they had different species in view, the habits of which were so different as to be noticed by him, yet not such as to lead him to detect their specific distinctions.

Of Mr. Audubon's inaccuracies, I will not here speak at any length, nor am I willing to be suspected of any sympathy with those who have sought, on this account, to detract from the transcendent merits of the great painter and student of nature. While, however, we honor all that was excellent, we may at the same time, without disparagement to his great merits, correct whatever mistakes may have crept into his works, and even be pardoned if we enjoy a quiet laugh over some conclusions, now known to be visionary, but which his exuberant imagination, now and then, led him to put into printed words. We will take only one instance.

In his account of the common Black-Poll Warbler (*Dendroica striata*), we find the following eloquent picture of the delight with which he first discovered the nest of this bird: "One fair morning, while several of us were scrambling through one of the thickets of trees, scarcely waist high, my youngest son chanced to scare from her nest a female of the Black-Poll Warbler. Reader, just fancy how this raised my spirits. I felt as if the enormous expense of our voyage had been refunded. There, said I, we are the first white men who have seen such a nest."

It seems almost too bad to apply the touchstone of sober reality to so charming an evidence as is here given of the whole-hearted manner with which this enthusiastic lover of ornithology devoted himself to his mission,

His warmth and gratification have a touch of true poetry. But when we know that Mr. Audubon's whole party started in the expedition from Eastport, in Maine, where they also spent several days before they commenced their voyage to Labrador, and that one of his party was a near resident to Eastport; and when we further know that all around Eastport, and especially on the islands, the Black-Poll Warbler is one of the most common birds, we must see at once how far a vivid imagination has supplied the material for his conclusions, and that they had but little foundation in reality.

We will not dwell here any further upon the statements occurring in Mr. Audubon's writings, not consistent with the facts, as now known to us, for our limits do not permit, and the instance given above will sufficiently answer as an example of the mistakes into which his oversanguine temperament occasionally led him. His errors, we are sure, are never intentional; his statements of facts, when he tells us they are his own, we can rely upon: but when he accepts the information of others, or draws inferences from insufficient data, it is then that his accounts must be received with more caution, and that he exposed himself to the unkind and bitter attacks, in which those who do not appreciate his real excellences, or who are too intolerant of what are, after all, only venial faults, spots on the face of a great luminary, have too often indulged.

A few words on our own shortcomings, and we will close these desultory remarks. The Oölogy of North America, Part I., gives several illustrations which subsequent investigations show to have been not so well authenticated as they were supposed to be when published. They are: The egg given as that of the Goshawk (*Astur*

atricapillus), on the authority of a Western naturalist; that given for the egg of the Western Rough-Legged Hawk (*Archibuteo ferrugineus*), on the authority of the late Dr. Heermann; that of the Pigeon Hawk (*Falco columbarius*), the grounds for which supposition were given in full; and that of the Violet-green Swallow (*Hirundo thalassina*), on the authority of the late Dr. Webb.

Subsequent discoveries of well-authenticated eggs of all these birds, quite different from those figured, seem to show that in each instance there is an error in regard to their identity.

The egg figured for that of the Goshawk is, possibly, a very faint specimen of a Red-tailed Hawk's. The Swallow's egg may be that of *Hirundo lunifrons*, and that taken for the Pigeon Hawk's, that of a Cooper's Hawk. The egg given by Dr. Heermann as that of the Western Rough-leg, cannot now be determined. It evidently is not what it was supposed to be.

Without seeking to conceal the fact that four of the eggs figured in the Oölogy, appear not to belong to the places in which they are found, nor to wholly absolve the writer from so much of the responsibility as belongs to him, of having been led into errors by the mistakes of others, he may here state that in regard to the egg of the *Falco columbarius*, it was given as such at the time, with the full expression of grave doubts as to its authenticity. All the facts, all the contradictory evidence, were given with all possible care, and to the reader was given all the data in the writer's power, to enable him to form his own judgment. An English traveller, who was so fortunate as to procure specimens of undoubted eggs of this bird, has seen fit, in the pages of the

"London Ibis," to comment, with some impertinence, upon the want of good judgment shown in not accepting Mr. Audubon's testimony as positive, and as outweighing what seemed contradictory to it. It is a sufficient answer to all this, to here add that by not doing as this writer now suggests, supposing the case fully made out in favor of his views, another mistake was avoided. The egg figured and described by Mr. Audubon is, in my judgment, not that of this bird, but of the Sharp-shinned Hawk. My English friend was, therefore, a little fast, and his comments are not based upon quite so sure a foundation as he supposed. Another time, perhaps, he will confine himself to facts within his scope. In assuming that Audubon was *ex necessitate* right, he presumed beyond his ability to establish.

If, in the above pages, I have shown, however imperfectly, to all ornithological readers, how easy it is for the most careful and best intentioned to make mistakes, to be led into errors, to make wrong deductions, and to fail to see and to correct previous wrong conclusions; and if I shall succeed in impressing upon all students in Oölogy especially, the absolute need there is always of the most thorough identification of the bird to which their eggs belong, I shall have done all that I have sought to do. Never keep in your collection, except as a curiosity, an egg or nest which has not been identified. Above all, never guess at its parentage. Never name it without the most unquestionable evidence that you are right. While there are a few eggs that are unmistakable, there are more that you can never be sure of, save by positive knowledge of their parentage.